```
=> d his

     (FILE 'HOME' ENTERED AT 10:19:19 ON 16 MAY 2005)

     FILE 'HCAPLUS' ENTERED AT 10:19:24 ON 16 MAY 2005
                E MARTIN N M/AU
L1            2 S E3
                E MARTIN NIALL/AU
L2           17 S E3-E5
                E SMITH G C/AU
L3            3 S E4
                E SMITH GRAEME/AU
L4           76 S E3 OR E7-E11
                E WHITE C/AU
L5           31 S E39 OR E113 OR E143 OR E145
                E NEWTON R/AU
L6          178 S E9 OR E67 OR E68
                E DOUGLAS D/AU
L7           10 S E9 OR E48
                E EVERSLEY P/AU
L8            4 S E4 OR E5
L9           19 S VILE J?/AU
L10         311 S L1-L9
L11           5 S L10 AND PHTHALAZINONE?

     FILE 'REGISTRY' ENTERED AT 10:35:41 ON 16 MAY 2005
                ACTIVATE WAR506PAR/Q
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L12             STR
               ---------
                ACTIVATE WAR506FUL/A
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L13             STR
L14          801 SEA FILE=REGISTRY SSS FUL L13
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                ACTIVATE WAR506CHI1/Q
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L15             STR
               ---------
L16             STR L15
                SAVE TEMP L16 WAR506CHI1/Q
L17           41 S L16 SAM  SUB=L14
L18          786 S L16 FUL SUB=L14

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L19           4 S L14 AND (L10 OR L11)
                SELECT L19 RN 1-4

     FILE 'REGISTRY' ENTERED AT 11:19:15 ON 16 MAY 2005
L20         673 S E1-E673
L21         191 S L18 NOT L20
L22         595 S L20 AND L18
L23         592 S L22 NOT (32003-14-8 OR 53242-88-9 OR 57835-95-7)

     FILE 'HCAPLUS' ENTERED AT 11:32:30 ON 16 MAY 2005
L24           7 S L23
L25           4 S L24 AND L19
L26           3 S L24 NOT L25

     FILE 'REGISTRY' ENTERED AT 11:35:13 ON 16 MAY 2005
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L27          236 S C12H19N3O3S/MF
L28         1101 S C20H19N3O4/MF
L29            9 S C24H15F3N4O2/MF
L30          249 S C25H22N4O5/MF
L31          334 S C23H19N3O5S/MF
L32          191 S C24H19N5O2/MF
L33          229 S C21H16CLN3O3S/MF
L34           16 S C25H18F3N3O4/MF
L35          167 S C21H14N4O3/MF
L36          441 S C25H22N4O4/MF
L37           15 S C22H24N3O2/MF
L38           78 S C22H16CLN3O5S/MF
L39            3 S C23H15F2N5O2/MF
L40          229 S C21H16CLN3O3S/MF
L41          396 S C22H17N3O5/MF
L42          624 S C22H20N4O4/MF
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L44           17 S C24H18F2N4O4/MF
L45          540 S C22H19N3O4S/MF
L46           18 S C23H15CL2N5O2/MF
L47           81 S C21H16BRN3O3S/MF
L48          271 S C26H23N3O6/MF
L49          757 S C24H24N4O2/MF
L50           42 S C24H18CL2N4O4/MF
L51          829 S C22H19N3O3S/MF
L52          109 S C22H16N6O2/MF
L53          540 S C22H19N3O4S/MF
L54          741 S C25H27N3O4/MF
L55          888 S C24H26N4O2/MF
L56          206 S C23H19N5O4/MF
L57          693 S C21H17N3O3S/MF
L58          524 S C16H12N4O/MF
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L63           28 S C25H19F3N4O4/MF
L64          170 S C24H19N5O3/MF
L65           39 S L21 AND (L27-L64)

     FILE 'HCAPLUS' ENTERED AT 12:51:24 ON 16 MAY 2005
L66            8 S L65
L67            5 S L66 NOT PY>=2000

=> d ibib abs l11 1-5

L11  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2005:331915  HCAPLUS
TITLE:                   Phthalazinones. Part 1: the design and
                         synthesis of a novel series of potent inhibitors of
                         poly(ADP-ribose)polymerase
AUTHOR(S):               Loh, Vincent M.; Cockcroft, Xiao-Ling; Dillon,
                         Krystyna J.; Dixon, Lesley; Drzewiecki, Jan;
                         Eversley, Penny J.; Gomez, Sylvie; Hoare,
                         Janet; Kerrigan, Frank; Matthews, Ian T. W.; Menear,
                         Keith A.; Martin, Niall M. B.; Newton,
                         Roger F.; Paul, Jane; Smith, Graeme C. M.
                         ; Vile, Julia; Whittle, Alan J.
CORPORATE SOURCE:        KuDOS Horsham Ltd, Horsham, West Sussex, RH13 5PX, UK
SOURCE:                  Bioorganic & Medicinal Chemistry Letters (2005),
```

15(9), 2235-2238
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Screening of the Maybridge compound collection identified 4-arylphthalazinones as micromolar inhibitors of PARP-1 catalytic activity. Subsequent optimization of both inhibitory activity and metabolic stability led to a novel series of meta-substituted 4-benzyl-2H-phthalazin-1-ones with low nanomolar, cellular activity as PARP-1 inhibitors and promising metabolic stability in vitro.

L11 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:238692 HCAPLUS
DOCUMENT NUMBER: 142:316849
TITLE: Preparation of **phthalazinones** as PARP inhibitors
INVENTOR(S): **Martin, Niall Morrison Barr; Smith, Graeme Cameron**; Jackson, Stephen Philip; Loh, Vincent M., Jr.; Cockcroft, Xiao-Ling Fan; Matthews, Ian Timothy Williams; Menear, Keith Allan; Kerrigan, Frank; Ashworth, Alan
PATENT ASSIGNEE(S): Kudos Pharmaceuticals Limited, UK; Maybridge Limited
SOURCE: U.S. Pat. Appl. Publ., 67 pp., Cont.-in-part of U.S. Ser. No. 799,154.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005059663	A1	20050317	US 2004-876080		20040624
PRIORITY APPLN. INFO.:			GB 2003-5681	A	20030312
			US 2003-454995P	P	20030314
			US 2003-493399P	P	20030806
			US 2003-526244P	P	20031201
			US 2004-799154	A2	20040312

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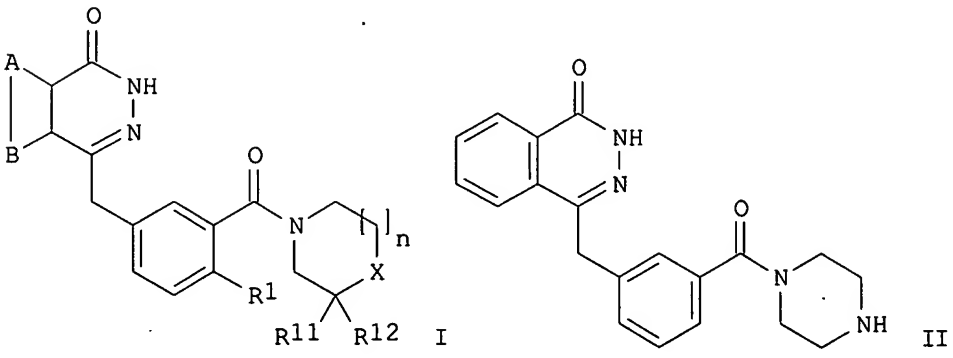

AB The title compds. [I; A and B together represent (un)substituted fused aromatic ring; X = NRx or CRxRy; if X= NRx then n = 1 or 2 and if X = CRxRy then n = 1; Rx = H, (un)substituted C1-20 alkyl, C5-20 aryl, C3-20 heterocyclyl, amido, thioamido, ester, acyl, and sulfonyl groups; Ry = H, OH, NH2; or Rx and Ry may together form a spiro(C3-7)cycloalkyl or heterocyclyl group; R11 and R12 are both H, or when X = CRxRy, R11, R12, Rx and Ry, together with the carbon atoms to which they are attached, may form (un)substituted fused aromatic ring; R1 = H, halo], were prepared Thus, reacting 3-(4-oxo-3,4-dihydrophthalazin-1-ylmethyl)benzoic acid (preparation given) with tert-Bu 1-piperazinecarboxylate afforded 77% II which had IC50 of < 0.02 μM against PARP. All compds. I tested had a IC50 of < 0.1 μM in the PARP assay. The pharmaceutical composition comprising the compound I is claimed.

L11 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:780675 HCAPLUS
DOCUMENT NUMBER: 141:296034
TITLE: Preparation of **phthalazinones** as PARP inhibitors
INVENTOR(S): **Martin, Niall Morrison Barr; Smith, Graeme Cameron Murray**; Jackson, Stephen Philip; Loh, Vincent M., Jr.; Cockcroft, Xiao-Ling Fan; Matthews, Ian Timothy Williams; Menear, Keith Allan; Kerrigan, Frank; Ashworth, Alan
PATENT ASSIGNEE(S): Kudos Pharmaceuticals Limited, UK; Maybridge Limited
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080976	A1	20040923	WO 2004-GB1059	20040312

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
GB 2003-5681	A	20030312
US 2003-454995P	P	20030314
US 2003-493399P	P	20030806
US 2003-526244P	P	20031201

OTHER SOURCE(S): MARPAT 141:296034
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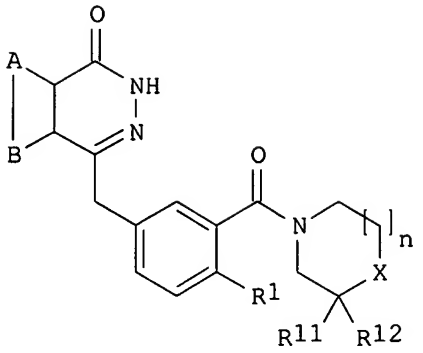

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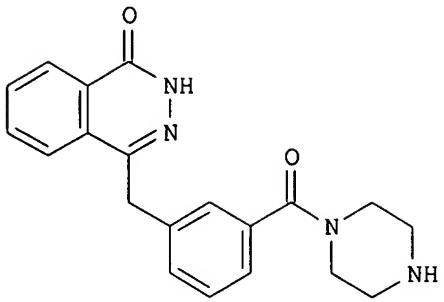


II

AB The title compds. [I; A and B together represent (un)substituted fused aromatic ring; X = NRx or CRxRy; if X= NRx then n = 1 or 2 and if X = CRxRy then n = 1; Rx = H, (un)substituted C1-20 alkyl, C5-20 aryl, C3-20 heterocyclyl, amido, thioamido, ester, acyl, and sulfonyl groups; Ry = H, OH, NH2; or Rx and Ry may together form a spiro(C3-7)cycloalkyl or heterocyclyl group; R11 and R12 are both H, or when X = CRxRy, R11, R12, Rx and Ry, together with the carbon atoms to which they are attached, may form (un)substituted fused aromatic ring; R1 = H, halo], were prepared Thus, reacting 3-(4-oxo-3,4-dihydrophthalazin-1-ylmethyl)benzoic acid (preparation given) with tert-Bu 1-piperazinecarboxylate afforded 77% II which had IC50 of < 0.02 μM against PARP. All compds. I tested had a IC50 of < 0.1 μM in the PARP assay. The pharmaceutical composition comprising the compound I is claimed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:892770 HCAPLUS
DOCUMENT NUMBER: 139:381498
TITLE: **Phthalazinone** derivatives useful as inhibitors of PARP (i.e., poly(ADP-ribose) polymerase) and their preparation, pharmaceutical compositions, and use, e.g., as potentiators in the treatment of cancer
INVENTOR(S): **Martin, Niall Morrison Barr; Smith, Graeme Cameron Murray; Eversley, Penny Jane**; Cockcroft, Xiao-Ling Fan; Kerrigan, Frank; Hoare, Janet; Dixon, Lesley
PATENT ASSIGNEE(S): Kudos Pharmaceuticals Limited, UK; Maybridge PLC
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

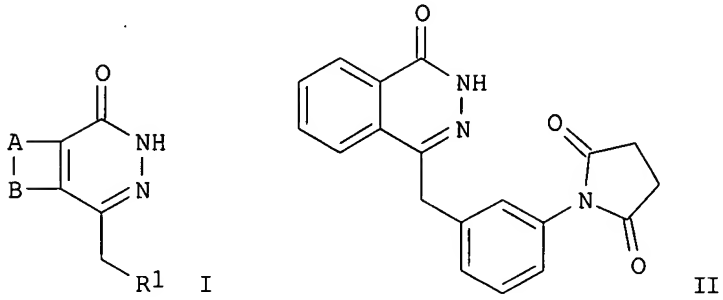
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003093261	A1	20031113	WO 2003-GB1817	20030429

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2482806	AA	20031113	CA 2003-2482806	20030429
US 2004023968	A1	20040205	US 2003-426147	20030429
EP 1501822	A1	20050202	EP 2003-722792	20030429
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-376497P	P 20020430
			WO 2003-GB1817	W 20030429

OTHER SOURCE(S): MARPAT 139:381498
GI



AB Title compds. I and their isomers, salts, solvates, chemical protected forms, and prodrugs thereof, are useful as pharmaceuticals, in particular, for the treatment of diseases ameliorated by inhibiting the activity of PARP, i.e., poly(ADP-ribose) polymerase [wherein: A and B together = optionally substituted, fused aromatic ring; R1 = C5-7 aryl group substituted in the meta position by the group R2, and optionally further substituted; R2 = 5- or 6-membered lactams or cyclic ureas, bound at the amide N, or 5- or 6-membered cyclic imides, including piperazine-2,6-diones, bound at the imide N]. I are claimed as useful for therapy, in human or animals, and particularly for 3 cases: (1) inhibiting the activity of PARP, preferably to maximize DNA repair inhibition; (2) in treatment of a variety of disorders, including cardiovascular conditions, ischemia, neurotoxicity, and inflammation; and (3) as an adjunct in cancer therapy, or for potentiating tumor cells for treatment with ionizing radiation or chemotherapeutics. Examples include 43 prepns. of specific compds. I. For instance, phthalide was cyclocondensed with 3-nitrobenzaldehyde to give 2-(3-nitrophenyl)indan-1,3-dione, which was re-cyclized with hydrazine to give 4-(3-aminobenzyl)-2H-phthalazin-1-one. This amine was cyclized with succinic anhydride in refluxing acetic acid to give invention compound II, a preferred compound In a test for inhibition of HeLa cellular PARP in vitro, II had an IC50 value of < 0.03 μM, vs. 7.2 μM for the base structure, 1(2H)- **phthalazinone**. In a test for potentiation of the alkylating agent Me methanesulfonate (MMS) against HeLa cells in vitro, several compds., including II, had potentiating factors (PF50) of ≥1 at 200 nM.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:353439 HCAPLUS
DOCUMENT NUMBER: 136:355242
TITLE: Preparation of **phthalazinones** as PARP inhibitors
INVENTOR(S): **Martin, Niall Morrison Barr; Smith, Graeme Cameron Murray; White, Charles Richard; Newton, Roger Frank; Douglas, Diane Gillian; Eversley, Penny Jane; Vile, Julia**
PATENT ASSIGNEE(S): Kudos Pharmaceuticals Limited, UK; Maybridge PLC
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036576	A1	20020510	WO 2001-GB4729	20011025
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CA 2423279	AA	20020510	CA 2001-2423279	20011025
AU 2001095789	A5	20020515	AU 2001-95789	20011025
EP 1330442	A1	20030730	EP 2001-976521	20011025
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GB 2384776	B2	20040303		
BR 2001015062	A	20040217	BR 2001-15062	20011025
NZ 525138	A	20040326	NZ 2001-525138	20011025
JP 2004513121	T2	20040430	JP 2002-539335	20011025
US 2002183325	A1	20021205	US 2001-21506	20011030
ZA 2003002112	A	20040220	ZA 2003-2112	20030317
NO 2003001498	A	20030402	NO 2003-1498	20030402

PRIORITY APPLN. INFO.:	GB 2000-26505	A	20001030
	US 2001-275066P	P	20010312
	US 2000-245662P	P	20001106
	WO 2001-GB4729	W	20011025

OTHER SOURCE(S): MARPAT 136:355242
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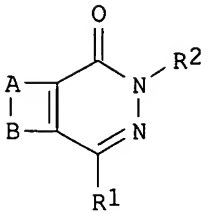

I

AB The title compds. [I; A and B together represent (un)substituted fused aromatic ring; R1 = LR3 (wherein L = (CH2)nQm(CH2)p; n, m, p = 0-3, the sum of n, m and p = 1-3; Q = O, S, NH, CO; R3 = (un)substituted C5-20 aryl); R2 = H, (un)substituted C1-7 alkyl, C3-20 heterocyclyl, C5-20 aryl, etc.], useful for inhibiting the activity of PARP (poly(ADP-ribose)synthase), were prepared General procedures for synthesis of I were described. Biol. data such as IC50 values against PARP, and DEF which is a ratio of the enhancement of the cell growth inhibition elicited by test compds. in the presence of bleomycin compared to bleomycin alone, were given. E.g., the compound I [AB = benzo; R1 = 4-chlorobenzyl; R2 = H] showed IC50 of 1.8 μM against PARP, and DEF of 1.9.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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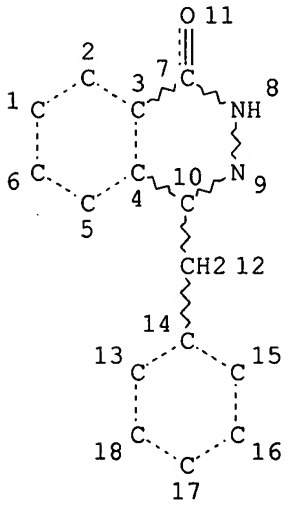
L13 STR



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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE
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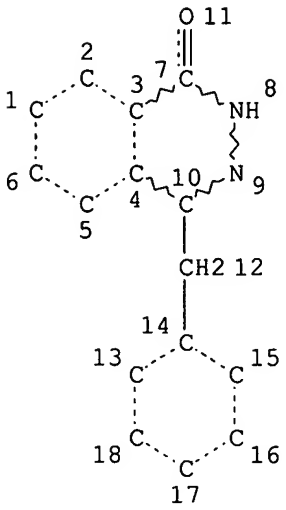

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 13 10
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

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L67  ANSWER 1 OF 5  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         1996:149535  HCAPLUS
DOCUMENT NUMBER:          124:316902
TITLE:                    Synthesis of new 5-carboxyphthalimides containing
                          sulfonamide moieties with biological interest
AUTHOR(S):                Eyada, H. A.; Khalaf, N. S.; El-Sayed, Ragab A.;
                          El-Hakim, M. H.
CORPORATE SOURCE:         Faculty Science, Al-Azhar University, Nasr City, Egypt
SOURCE:                   Al-Azhar Journal of Pharmaceutical Sciences (1994),
                          14, 33-9
                          CODEN: AAJPFT; ISSN: 1110-1644
```

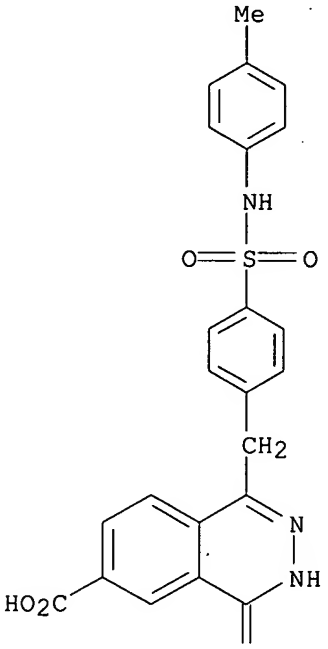
PUBLISHER: Al-Azhar University, Faculty of Pharmacy
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The condensation of trimellitic anhydride [i.e., 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid] with sulfa drugs or (sulfonamido)phenylacetic acid gave the corresponding phthalimides. The compds. were screened as bactericides.

IT **175980-81-1P 175980-82-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and bactericidal activity of sulfa drug derivs.)

RN 175980-81-1 HCAPLUS
CN 6-Phthalazinecarboxylic acid, 3,4-dihydro-1-[[4-[[(4-methylphenyl)amino]sulfonyl]phenyl]methyl]-4-oxo- (9CI) (CA INDEX NAME)

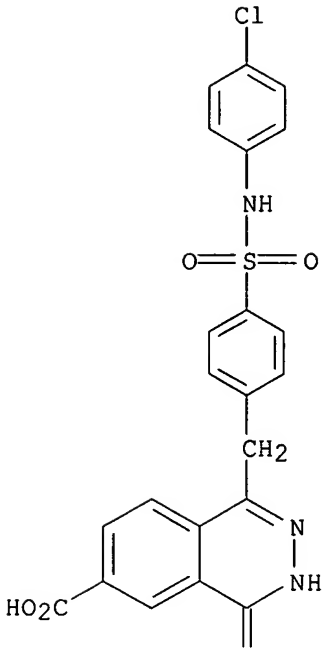
PAGE 1-A



PAGE 2-A

RN 175980-82-2 HCAPLUS
CN 6-Phthalazinecarboxylic acid, 1-[[4-[[(4-chlorophenyl)amino]sulfonyl]phenyl]methyl]-3,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

L67 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:138851 HCAPLUS
DOCUMENT NUMBER: 124:289404
TITLE: Synthesis of some new sulfonamides derived from tetrachlorophthalimides
AUTHOR(S): Eyada, H. A.
CORPORATE SOURCE: Faculty Science, Al-Azhar University, Cairo, Egypt
SOURCE: Al-Azhar Journal of Pharmaceutical Sciences (1994), 13, 104-11
CODEN: AAJPFT; ISSN: 1110-1644
PUBLISHER: Al-Azhar University, Faculty of Pharmacy
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

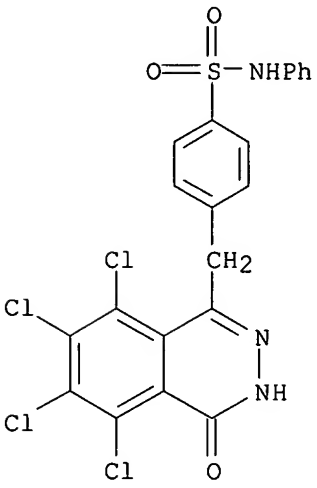
AB Condensation of 3,4,5,6-tetrachlorophthalic anhydride with RNHSO2C6H4CH2CO2H (R = Ph, 4-ClC6H4) and sulfa drugs gave arylidenephthalides I (R = Ph, 4-ClC6H4, X = O) and phthalimides II [R =

H, C(NH2):NH, 2-thiazolyl, 2-pyrimidinyl, etc., Z = N], resp. Thionation of I (X = O) produced the thio derivs. I (X = S) (III). Treatment of I (X = O) and III with methanolic sodium methoxide gave indandiones II (R = Ph, 4-ClC6H4, Z = CH) and bis(indanone) sulfides, resp. Interaction of I (X = O) with hydrazine hydrate and sulfanilamide furnished pyridazines V and indolones VI, resp.

IT **86355-25-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, bactericidal, and fungicidal activity of sulfonamides)

RN 86355-25-1 HCAPLUS

CN Benzenesulfonamide, N-phenyl-4-[(5,6,7,8-tetrachloro-3,4-dihydro-4-oxo-1-phthalazinyl)methyl]- (9CI) (CA INDEX NAME)



L67 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1983:453512 HCAPLUS
DOCUMENT NUMBER:	99:53512
TITLE:	Action of Grignard reagents on phthalides, phthalimides and related compounds. Part II. Interaction of tetrachloro-3-(p-N-arylsulfonamidobenzal)phthalides with Grignard reagents, hydrazine hydrate and amines
AUTHOR(S):	El-Sharief, A. M. S.; El-Maghraby, A. A.; El-Said, A. S.
CORPORATE SOURCE:	Fac. Sci., Al-Azhar Univ., Cairo, Egypt
SOURCE:	Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1983), 22B(1), 87-90 CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 99:53512

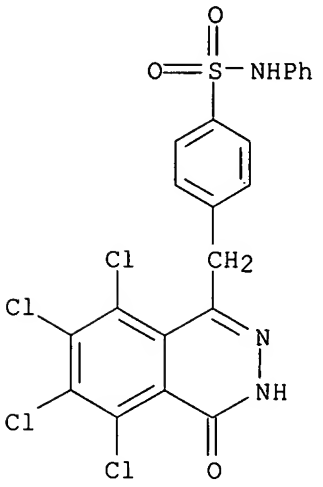
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

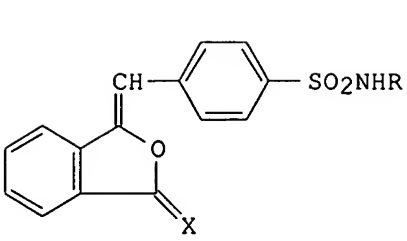
AB The tetrachlorophthalides I (R = Ph, p-MeC6H4), prepared from

p-(RNHSO2)C6H4CH2CO2H and phthalic anhydride, reacted with Grignard reagents to give the diketones II (R1 = Ph, Pr, Bu) and indones III (R1 = PhCH2, Et, Bu). III were also prepared from indandiones and Grignard reagents. I reacted with H2NNH2 and amines to give phthalazones IV and phthalimidines V [R2 = (un)substituted phenyl].

IT **86355-25-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 86355-25-1 HCAPLUS
CN Benzenesulfonamide, N-phenyl-4-[(5,6,7,8-tetrachloro-3,4-dihydro-4-oxo-1-phthalazinyl)methyl]- (9CI) (CA INDEX NAME)



L67 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1981:462106 HCAPLUS
DOCUMENT NUMBER: 95:62106
TITLE: Action of phosphorus pentasulfide on the products of interaction of p-sulfamoylphenylacetic acids with phthalic anhydride
AUTHOR(S): Islam, A. M.; El-Maghraby, A. A.; El-Sharief, A. M. S.; Aly, F. M. M.
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt
SOURCE: Egyptian Journal of Chemistry (1980), Volume Date 1979, 22(3), 209-22
CODEN: EGJCA3; ISSN: 0367-0422
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 95:62106
GI



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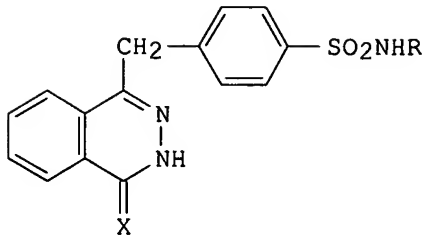


II

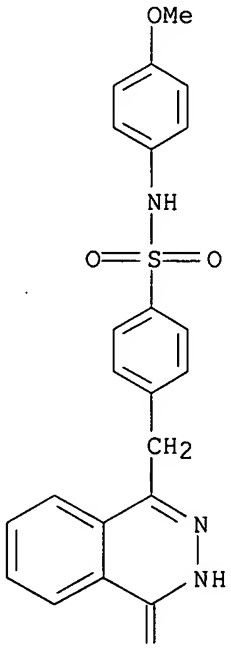
AB Treating sulfamoylarylidenephthalides I (R = Ph, 2-, 3-, 4-MeC6H4, 2-, 4-MeOC6H4, 2-, 4-ClC6H4, 4-BrC6H4; X = O), prepared from 4-RNHSO2C6H4CH2CO2H and phthalic anhydride, with P2O5 gave 60-70% I (X = S). II (X = S) were similarly prepared from II (X = O), obtained by treating I (X = O) with N2H4.

IT **78001-36-2P 78001-37-3P 78298-01-8P**
78298-02-9P 78298-03-0P 78298-04-1P
78298-05-2P 78298-06-3P 78298-07-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with phosphorus pentasulfide)

RN 78001-36-2 HCAPLUS

CN Benzenesulfonamide, 4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

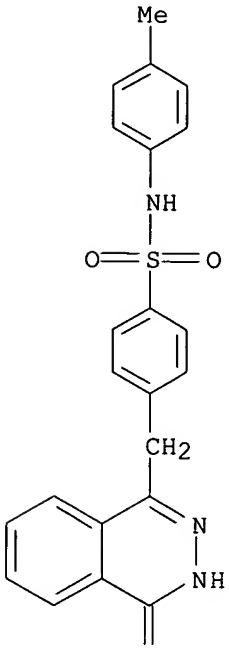
PAGE 1-A



PAGE 2-A

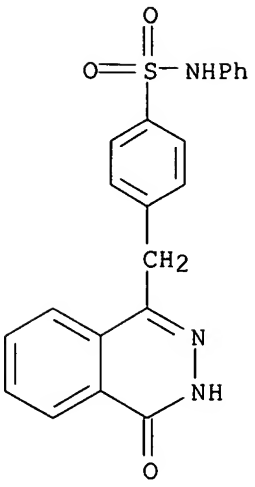
RN 78001-37-3 HCAPLUS
CN Benzenesulfonamide, 4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]-N-(4-methylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

RN 78298-01-8 HCAPLUS
CN Benzenesulfonamide, 4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]-N-phenyl- (9CI) (CA INDEX NAME)



RN 78298-02-9 HCAPLUS
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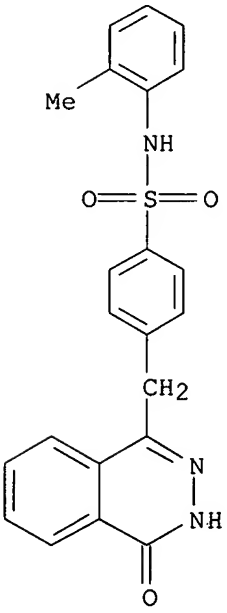

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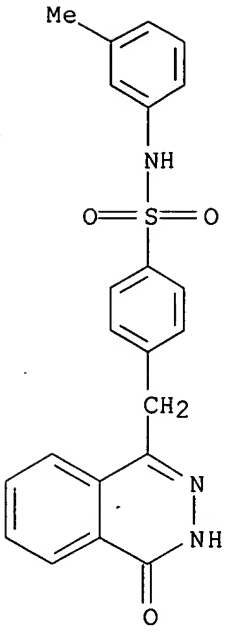

RN 78298-04-1 HCAPLUS
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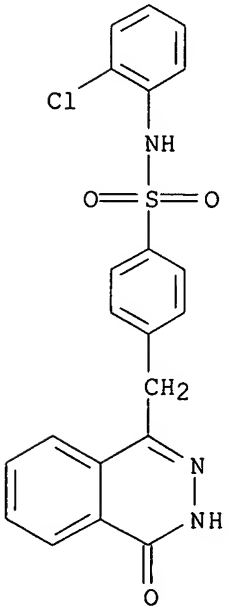
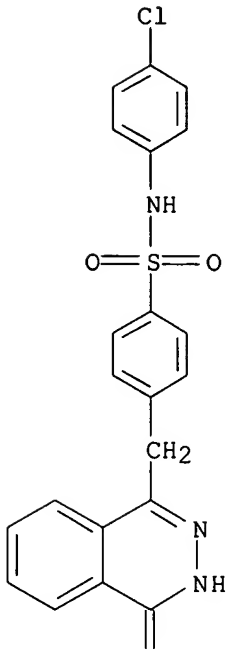


RN 78298-05-2 HCAPLUS
CN Benzenesulfonamide, N-(4-chlorophenyl)-4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]- (9CI) (CA INDEX NAME)

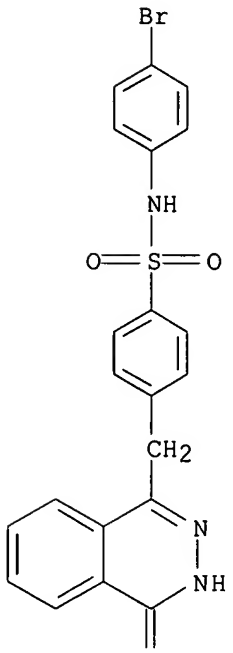
PAGE 1-A



PAGE 2-A

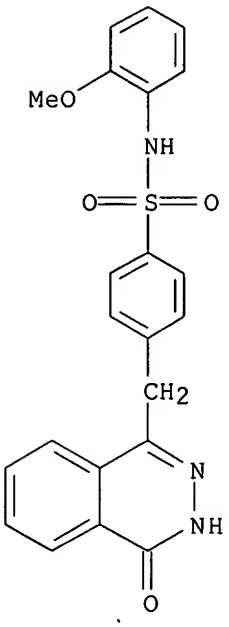
RN 78298-06-3 HCAPLUS
CN Benzenesulfonamide, N-(4-bromophenyl)-4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

RN 78298-07-4 HCAPLUS
CN Benzenesulfonamide, 4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



L67 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1981:460757 HCAPLUS
DOCUMENT NUMBER: 95:60757
TITLE: Proton magnetic resonance spectra of some p-(N-arylsulfamido)phenylacetic acids and 4-(p-N-arylsulfamido)benzylphthalazones
AUTHOR(S): Islam, A. M.; Ibrahim, E. H.; El-Maghraby, A. A.; Aly, F. M.
CORPORATE SOURCE: Fac. Sci., Al-Azhar Univ., Cairo, Egypt
SOURCE: Egyptian Journal of Chemistry (1980), Volume Date 1979, 22(5), 389-92
CODEN: EGJCA3; ISSN: 0367-0422
DOCUMENT TYPE: Journal
LANGUAGE: English
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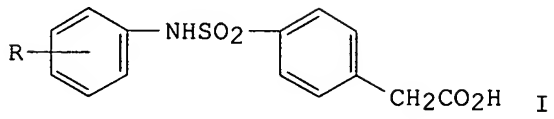

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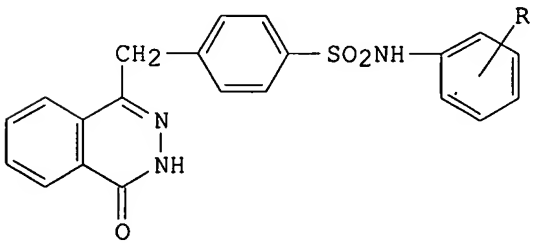


II

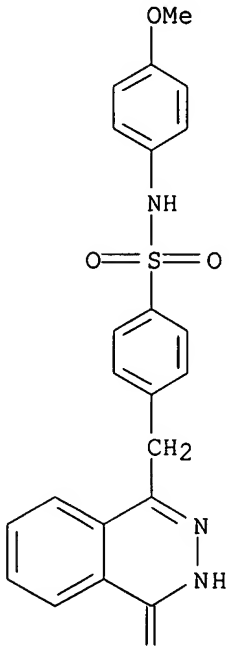
AB The 1H NMR of title compds. I (R = m-Me, p-MeO, p-Br, p-Cl) and II (p-MeO, p-Me) were compared.

IT **78001-36-2 78001-37-3**
RL: PRP (Properties)
(NMR of)

RN 78001-36-2 HCAPLUS

CN Benzenesulfonamide, 4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



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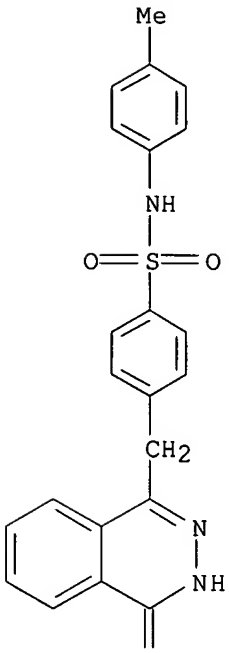
RN 78001-37-3 HCAPLUS

CN Benzenesulfonamide, 4-[(3,4-dihydro-4-oxo-1-phthalazinyl)methyl]-N-(4-methylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

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(FILE 'HOME' ENTERED AT 10:19:19 ON 16 MAY 2005)

FILE 'HCAPLUS' ENTERED AT 10:19:24 ON 16 MAY 2005

		E MARTIN N M/AU
L1	2	S E3
		E MARTIN NIALL/AU
L2	17	S E3-E5
		E SMITH G C/AU
L3	3	S E4
		E SMITH GRAEME/AU
L4	76	S E3 OR E7-E11
		E WHITE C/AU
L5	31	S E39 OR E113 OR E143 OR E145
		E NEWTON R/AU
L6	178	S E9 OR E67 OR E68
		E DOUGLAS D/AU
L7	10	S E9 OR E48
		E EVERSLEY P/AU
L8	4	S E4 OR E5
L9	19	S VILE J?/AU

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L10         311 S L1-L9
L11           5 S L10 AND PHTHALAZINONE?

     FILE 'REGISTRY' ENTERED AT 10:35:41 ON 16 MAY 2005
               ACTIVATE WAR506PAR/Q
              ---------
L12            STR
              ---------
               ACTIVATE WAR506FUL/A
              ---------
L13            STR
L14         801 SEA FILE=REGISTRY SSS FUL L13
              ---------
               ACTIVATE WAR506CHI1/Q
              ---------
L15            STR
              ---------
L16            STR L15
               SAVE TEMP L16 WAR506CHI1/Q
L17          41 S L16 SAM  SUB=L14
L18         786 S L16 FUL SUB=L14

     FILE 'HCAPLUS' ENTERED AT 11:00:09 ON 16 MAY 2005
L19           4 S L14 AND (L10 OR L11)
               SELECT L19 RN 1-4

     FILE 'REGISTRY' ENTERED AT 11:19:15 ON 16 MAY 2005
L20         673 S E1-E673
L21         191 S L18 NOT L20
L22         595 S L20 AND L18
L23         592 S L22 NOT (32003-14-8 OR 53242-88-9 OR 57835-95-7)

     FILE 'HCAPLUS' ENTERED AT 11:32:30 ON 16 MAY 2005
L24           7 S L23
L25           4 S L24 AND L19
L26           3 S L24 NOT L25

     FILE 'REGISTRY' ENTERED AT 11:35:13 ON 16 MAY 2005
L27         236 S C12H19N3O3S/MF
L28        1101 S C20H19N3O4/MF
L29           9 S C24H15F3N4O2/MF
L30         249 S C25H22N4O5/MF
L31         334 S C23H19N3O5S/MF
L32         191 S C24H19N5O2/MF
L33         229 S C21H16CLN3O3S/MF
L34          16 S C25H18F3N3O4/MF
L35         167 S C21H14N4O3/MF
L36         441 S C25H22N4O4/MF
L37          15 S C22H24N3O2/MF
L38          78 S C22H16CLN3O5S/MF
L39           3 S C23H15F2N5O2/MF
L40         229 S C21H16CLN3O3S/MF
L41         396 S C22H17N3O5/MF
L42         624 S C22H20N4O4/MF
L43           5 S C21H13CL4N3O3S/MF
L44          17 S C24H18F2N4O4/MF
L45         540 S C22H19N3O4S/MF
L46          18 S C23H15CL2N5O2/MF
L47          81 S C21H16BRN3O3S/MF
L48         271 S C26H23N3O6/MF
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L49          757 S C24H24N4O2/MF
L50           42 S C24H18CL2N4O4/MF
L51          829 S C22H19N3O3S/MF
L52          109 S C22H16N6O2/MF
L53          540 S C22H19N3O4S/MF
L54          741 S C25H27N3O4/MF
L55          888 S C24H26N4O2/MF
L56          206 S C23H19N5O4/MF
L57          693 S C21H17N3O3S/MF
L58          524 S C16H12N4O/MF
L59          769 S C25H29N3O4/MF
L60           12 S C24H16F3N5O2/MF
L61         1611 S C17H15N3O3/MF
L62          878 S C19H16N4O2/MF
L63           28 S C25H19F3N4O4/MF
L64          170 S C24H19N5O3/MF
L65           39 S L21 AND (L27-L64)

     FILE 'HCAPLUS' ENTERED AT 12:51:24 ON 16 MAY 2005
L66            8 S L65
L67            5 S L66 NOT PY>=2000
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